

CLAIM AMENDMENTS:

1.-11. (Cancelled)

12. (Original) A recording apparatus and display and associated support system comprising:

- a base engaged with a movable dolly;
- a boom arm pivotally mounted to the base;
- a jib arm pivotally mounted to a distal end of the boom arm;
- a recording apparatus mounting flange pivotally mounted to a distal end of the jib arm;
- a counterweight system for counterbalancing the boom arm and jib arm;
- a recording apparatus mounted to the recording apparatus mounting flange, the recording apparatus recording live character and set component images; and
- a display disposed proximate to the recording apparatus, the display presenting substantially real time generated initial composite images indicative of the live character and set component images and computer generated images.

13. (Original) The recording apparatus support system of claim 12 comprising a motion tracking system for generating recording apparatus position signals indicative of the position of the recording apparatus, wherein the recording apparatus position signals are used to generate initial composite image signals indicative of the initial composite images.

14. (Original) The recording apparatus support system of Claim 13 wherein the initial composite image signals are generated from a method comprising:

- generating a database of computer generated image element signals indicative of computer generated images, each image having a plurality of computer image elements, with a pre-established geometric position relative to one another;
- generating a database of computer image element position signals correlating the position of each of the image elements in a stage geometry;

recording character and set image element signals indicative of the live character and set component images within the stage geometry, each image having a plurality of character and set image elements;

recording, simultaneously with the live character and set image element signals, character and set position signals which associate a character or set component position with a corresponding position in the stage geometry,

generating the recording apparatus position signals indicative of the position of a recording apparatus in the stage geometry and optical field signals indicative of the optical field of view of the recording apparatus for the live character and set component images;

generating optical parameter signals corresponding to the optical parameters of the recording apparatus;

modifying the computer image element position signals in dependence on values of the recording apparatus position signals, optical parameter signals and optical field signals;

identifying select ones of the character and set image element signals to be replaced by select ones of the computer generated image element signals in dependence on the computer image element position signals and the character and set position signals;

substituting the identified character and set image element signals with corresponding ones of the computer generated image element signals to form the initial composite image signals.

15. (Original) The recording apparatus support system of claim 12 wherein the counterweight system and the counterbalanced boom and jib arms provide substantially weightless movement of the recording apparatus and display for an operator.

16. (Original) The recording apparatus support system of claim 15 comprising:
a position control system for controlling position of the boom arm and jib arm relative to position of the counterweight system;

a boom cylinder for supporting the boom arm and operatively connected between the body and the boom, the boom cylinder responsive to boom arm position signals generated from the position control system; and

a jib cylinder for supporting the jib arm and operatively connected between the boom arm and the jib arm, the jib cylinder responsive to jib arm position signals generated from the position control system;

wherein the boom arm position signals and the jib arm position signals enable the counterweight system and the counterbalanced boom and jib arms to provide substantially weightless movement of the recording apparatus and display for an operator.

17. (Original) The recording apparatus support system of claim 16 wherein the counterweight system comprises:

a counterweight boom arm for counter balancing the boom arm, pivotally mounted on an opposing side of the body relative to the boom arm, and

a counterweight jib arm for counter balancing the jib arm, pivotally mounted to a distal end of the counterweight boom arm.

18-20. (Cancelled)

21. (New) A recording apparatus and display and associated support system comprising:

a base engaged with a movable dolly;

a boom arm pivotally mounted to the base;

a jib arm pivotally mounted to a distal end of the boom arm;

a recording apparatus mounting flange pivotally mounted to a distal end of the jib arm;

a counterweight system for counterbalancing the boom arm and jib arm;

a recording apparatus mounted to the recording apparatus mounting flange, the recording apparatus recording live character and set component images; and

a display disposed proximate to the recording apparatus, the display presenting substantially real time generated initial composite images indicative of the live character and set component images and computer generated images;

wherein the initial composite image signals are generated from a method comprising the steps of:

generating a database of computer generated image element signals indicative of computer generated images, each image having a plurality of computer image elements, with a pre-established geometric position relative to one another;

generating a database of computer image element position signals correlating the position of each of the image elements in a stage geometry;

recording character and set image element signals indicative of the live character and set component images within the stage geometry, each image having a plurality of character and set image elements;

recording, simultaneously with the live character and set image element signals, character and set position signals which associate a character or set component position with a corresponding position in the stage geometry,

generating the recording apparatus position signals indicative of the position of a recording apparatus in the stage geometry and optical field signals indicative of the optical field of view of the recording apparatus for the live character and set component images;

generating optical parameter signals corresponding to the optical parameters of the recording apparatus;

modifying the computer image element position signals in dependence on values of the recording apparatus position signals, optical parameter signals and optical field signals;

identifying select ones of the character and set image element signals to be replaced by select ones of the computer generated image element signals in dependence on the computer image element position signals and the character and set position signals;

substituting the identified character and set image element signals with corresponding ones of the computer generated image element signals to form the initial composite image signals.